

WHAT IS CLAIMED IS:

1. An acoustic feedback suppression apparatus for suppressing acoustic feedback, comprising:

sound signal inputting means for inputting sound signals from a plurality of
5 signal paths;

filtering means for filtering out acoustic feedback components from said sound
signals;

signal path identifying means for identifying said signal paths having said
acoustic feedback caused thereon after converting each of said sound signals into digital
10 data with a first number of data samples; and

filter coefficient specifying means for specifying filter coefficients of said
filtering means after adding said sound signals respectively inputted from said signal
paths and converting into digital data with a second number of data samples, wherein

the second number of data samples is larger than the first number of data
15 samples, and

said filtering means is adapted to filter on the basis of said filter coefficients
specified by said filter coefficient specifying means out said acoustic feedback
components on said signal paths identified by said signal path identifying means.

20 2. An acoustic feedback suppression apparatus as set forth in claim 1, further
comprising

acoustic feedback characteristic comparing means for comparing
characteristics of said acoustic feedback components converted into said digital data
with said first number of data samples with characteristics of said acoustic feedback
25 components converted into said digital data with said second number of data samples,

said signal path identifying means being adapted to identify said signal paths
having said acoustic feedback caused thereon based on the result of the comparison
made by said acoustic feedback characteristic comparing means.

30 3. An acoustic feedback suppression apparatus as set forth in claim 2, in which

said acoustic feedback characteristic comparing means is adapted to convert
said digital data with said second number of data samples into digital data with said first
number of data samples to compare said characteristics of said acoustic feedback
components converted into said digital data with said first number of data samples with
35 said characteristics of said acoustic feedback components converted into said digital
data with said second number of data samples.

4. An acoustic feedback suppression apparatus as set forth in any one of claims 1 to 3, in which

5 the number of said signal path identifying means is smaller than the number of said signal paths.

5. An acoustic feedback suppression method, comprising the steps of:

adding sound signals respectively inputted from a plurality of signal paths;

judging whether or not acoustic feedback is caused in the added sound signal;

10 judging whether or not said acoustic feedback is caused in each of said sound signals respectively inputted from said signal paths when said acoustic feedback is judged to be caused in said added sound signal;

calculating filter coefficients for each of said sound signals having said acoustic feedback judged to be caused therein; and

15 suppressing said acoustic feedback on the basis of said filter coefficients calculated.